Video Wall Controller

Supports 3 x 3 and 2 x 2 Video Wall Array

User Manual

Rev. 1.01

RoHS Lead Free

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Chapter

1

Introduction

1.1 Introduction

Figure 1-1: iVW-FD133

The iVW-FD133 video wall controller box is for displaying a single video input on an array of monitors, implementing a large display without the inherent high costs of a single large monitor. The iVW-FD133 is for large displays where high definition video output is also essential. The video wall controller accepts a single DVI input, which is split over all the monitors in the array.

1.2 Benefits

The benefits of the iVW-FD133 include:

- Accurate, high-definition image
- Silent operation
- Simple setup
- Cheap implementation of a large display
- Major power savings over PC-based implementation
- Space saving

1.3 Features

The features of the iVW-FD133 include:

- DVI video input
- Nine DVI video outputs
- Support for up to 1920 x 1200 output resolution (per monitor)
- Multiple video output combinations including full video wall mode, clone mode and vertical replication mode
- Bezel control compensates for gaps between monitors

1.4 External Interfaces, Switches and LEDs

This section provides an overview of the connectors, switches and indicators on the iVW-FD133.

1.4.1 Front Panel

The front panel has the following buttons and indicators:

- Power indicator LED
- Video output LEDs
- Video input LED
- OSD menu keypad

Figure 1-2: iVW-FD133 Front Panel

1.4.2 Rear Panel

The rear panel has the following connectors, switches and indicators:

- 9 x DVI outputs
- 1 x DVI video input
- 1 x Power input
- 1 x Power switch
- 1 x RS-232

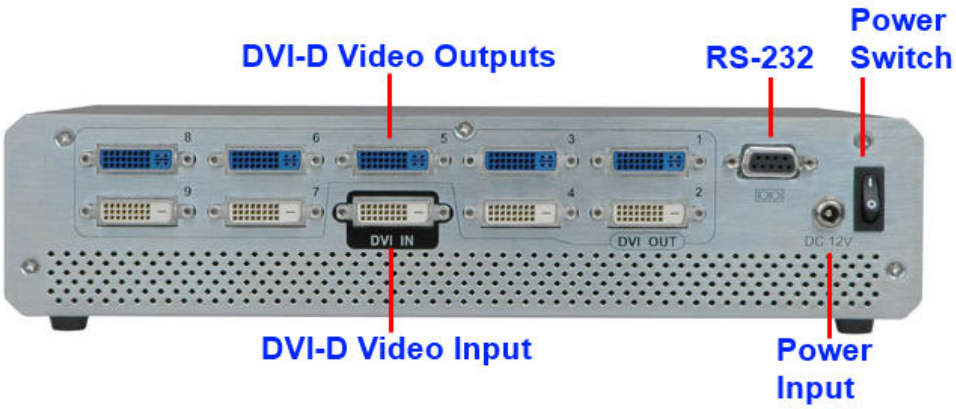

Figure 1-3: Rear Panel

1.5 Technical Specifications

iVW-FD133 video box features are listed in **Table 1-1**. See **Chapter 2** for details.

Specification	Detail
Model Name	iVW-FD133
Main Features	1. Multiple viewing modes 2. Software OSD 3. Remote control 4. Bezel masking
Inputs	One DVI-D single link
Outputs	Nine DVI-D single link
Dimensions (W x D x H)	295 mm x 190 mm x 65 mm (71.4mm with rubber feet)
Cooling	System fan
Input Resolution	800x600, 1024x768, 1152x864, 1280x768, 1280x960, 1280x1024, 1600x1200, 1680x1050, 1920x1200
Output Resolution	1024x768, 1360x768, 1280x1024, 1400x1500, 1680x1050, 1600x1200, 1920x1200, 1366x768, 1920x1080
Power Adapter Input	90 VAC to 264 VAC

Specification	Detail
Power Adapter Output	40 W
Safety and Emission	CE, FCC, LVD
Temperature	0ºC – 40ºC
Power Consumption	35 W

Table 1-1: Technical Specifications

1.6 Dimensions

- **Height**: 65 mm (71.4mm with rubber feet)
- **Width**: 295 mm
- **Depth**: 190 mm

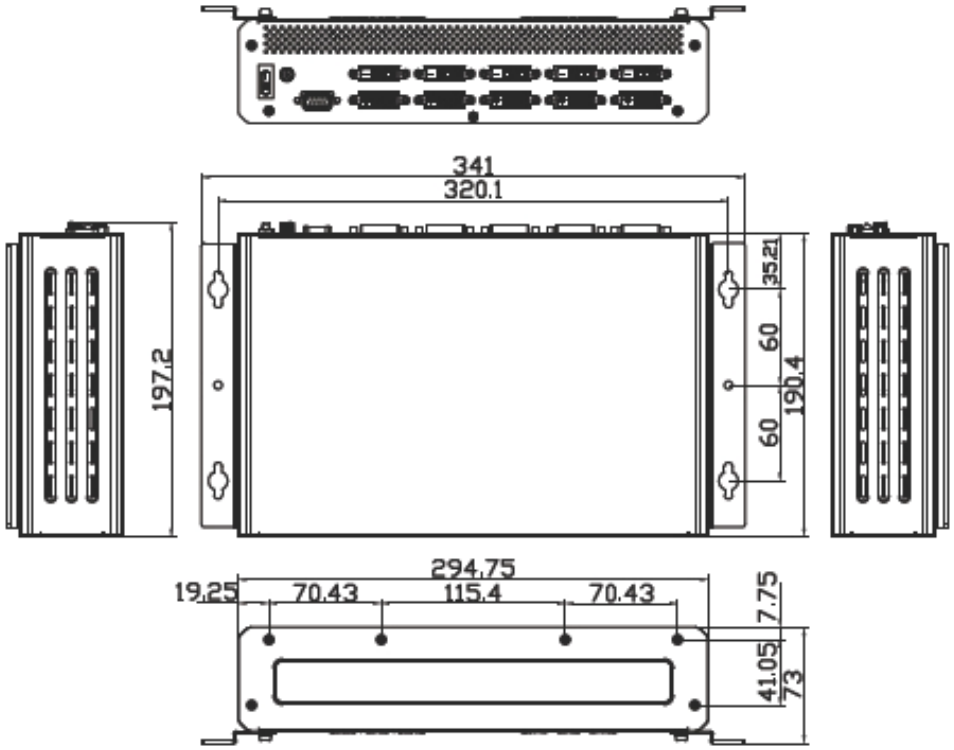

Figure 1-4: iVW-FD133 Dimensions

Chapter

2

Unpacking List

2.1 Unpacking Precautions

When the iVW-FD133 is unpacked, please do the following:

- Make sure the packing box is facing upwards so the iVW-FD133 does not fall out of the box.
- Make sure all the components shown in **Section 2.2** are present.

2.2 Packing List

NOTE:

If some of the components listed in the checklist below are missing, please do not proceed with the installation. Contact the reseller or vendor that sold the iVW-FD133 from or contact a sales representative directly. To contact a sales representative, please send an email to ds_sales@indstech.com.

The iVW-FD133 is shipped with the following components:

No.	Description	Image
1	iVW-FD133	
1	Power cord (European illustrated here)	
1	Power adapter	
1	Single-link DVI-D cable	
1	RS-232 cable	
1	Remote control	
1	Mounting brackets & screws	

Table 2-1: Package List Contents

Chapter

3

Installation

3.1 Installation Overview

The iVW-FD133 supports 4-panel, 6-panel, 9-panel, 36-panel (requires five video boxes) and 81-panel setups (requires ten video boxes).

3.1.1 Four (2 x 2) Panel Overview

The implementation of a 4-panel (2 x 2) array is shown in **Figure 3-4** below.

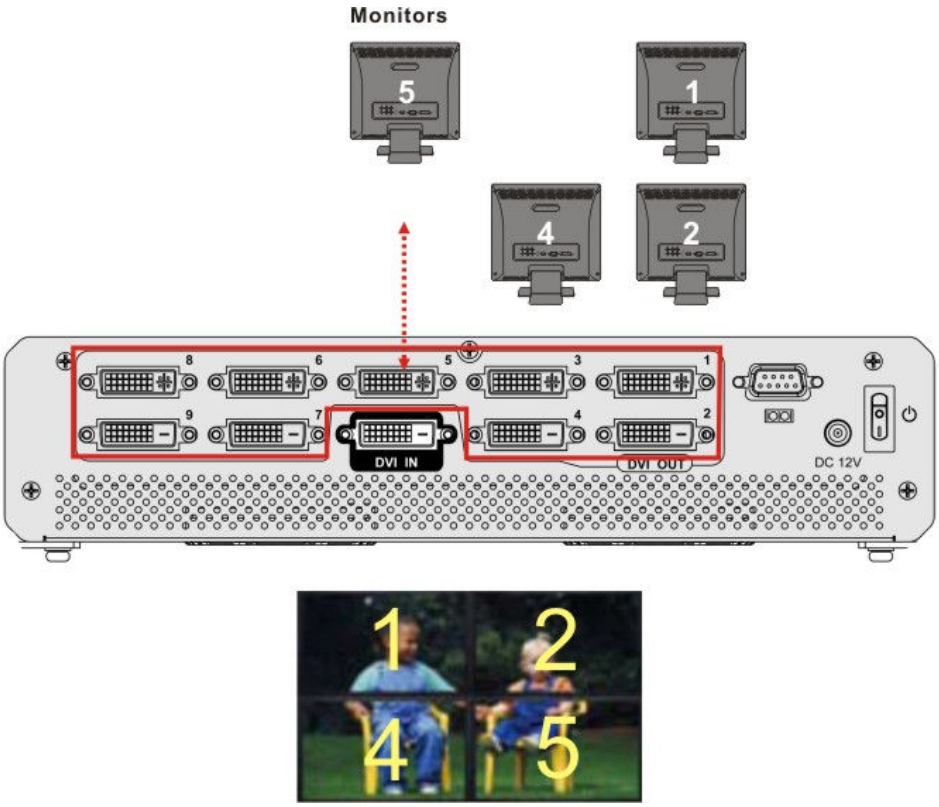

Figure 3-1: Four (2x2) Panel Setup

3.1.2 Six (2 x 3) Panel Overview

The implementation of a 6-panel (2 x 3) array is shown in **Figure 3-4** below.

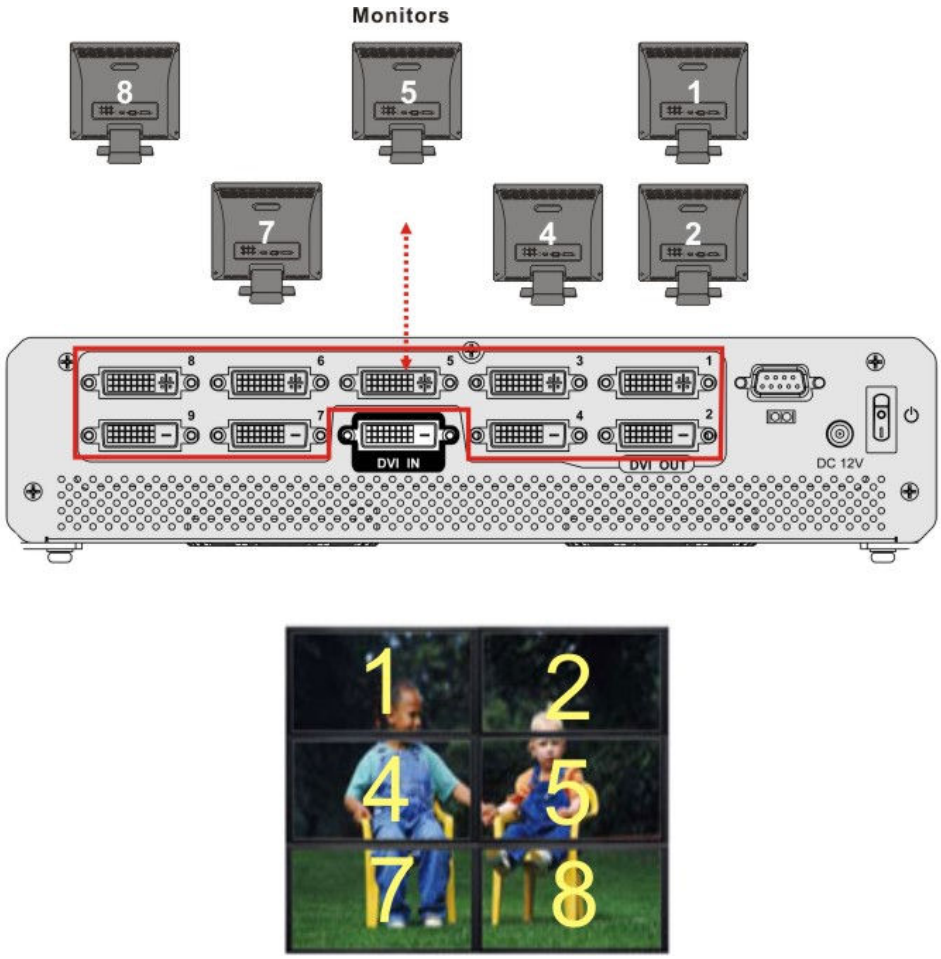

Figure 3-2: Six (2x3) Panel Setup

3.1.3 Six (3 x 2) Panel Overview

The implementation of a 6-panel (3 x 2) array is shown in **Figure 3-4** below.

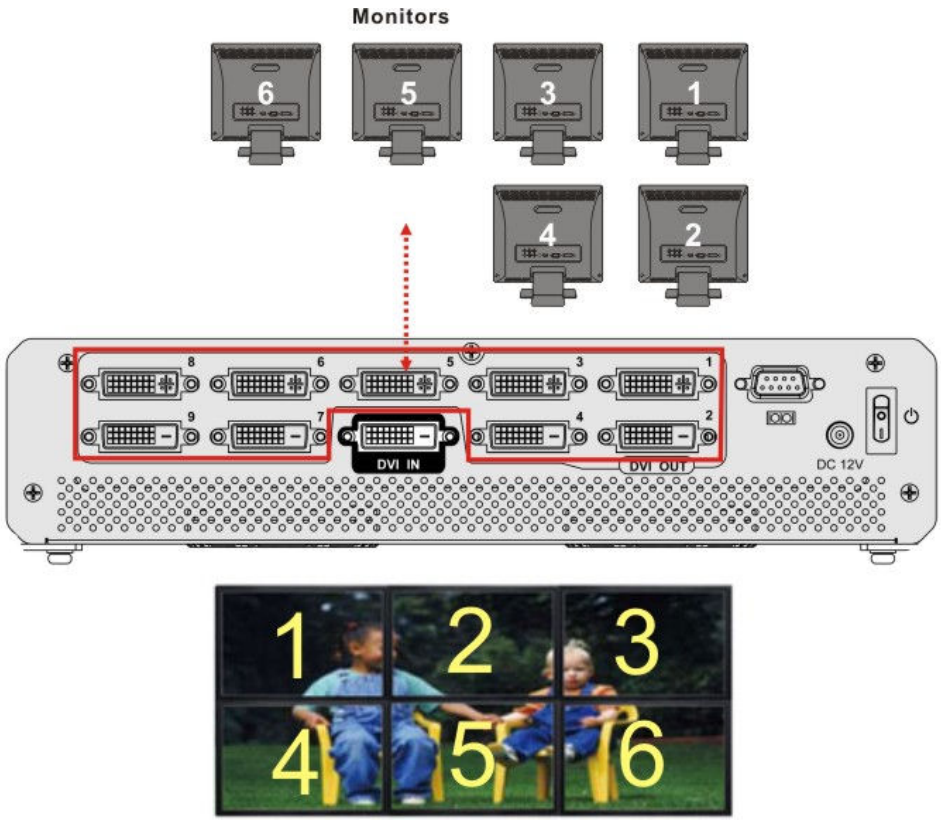

Figure 3-3: Six (3x2) Panel Setup

3.1.4 Nine (3 x 3) Panel Overview

The implementation of a 9-panel (3 x 3) array is shown in **Figure 3-4** below.

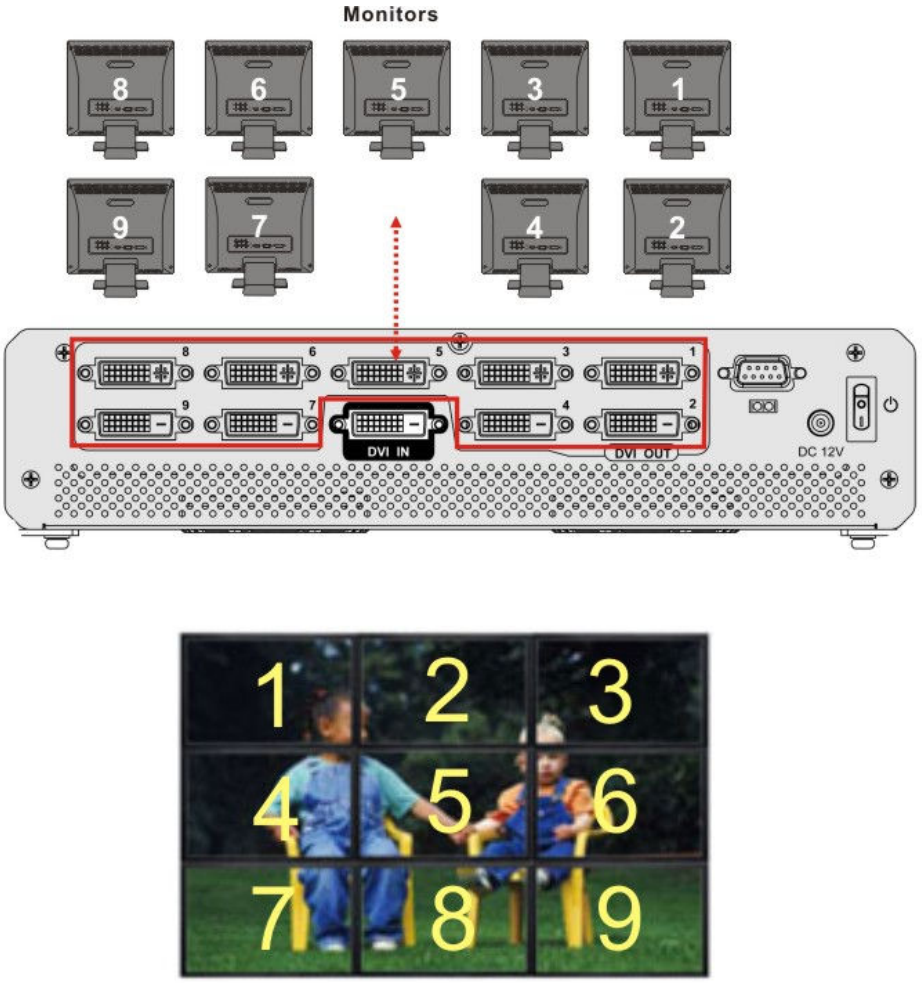

Figure 3-4: Nine Panel Setup

3.1.5 36 Panel, Multi-controller Installation Overview

The implementation of a 36-panel array using one iVW-FD133 as the master device and nine iVW-FD122 controllers as slave devices is shown in **Figure 3-5** below. Each iVW-FD122 slave controller connects to four display panels. Refer to the iVW-FD122 User Manual for installation guides to connect the controller in a 2 x 2 array.

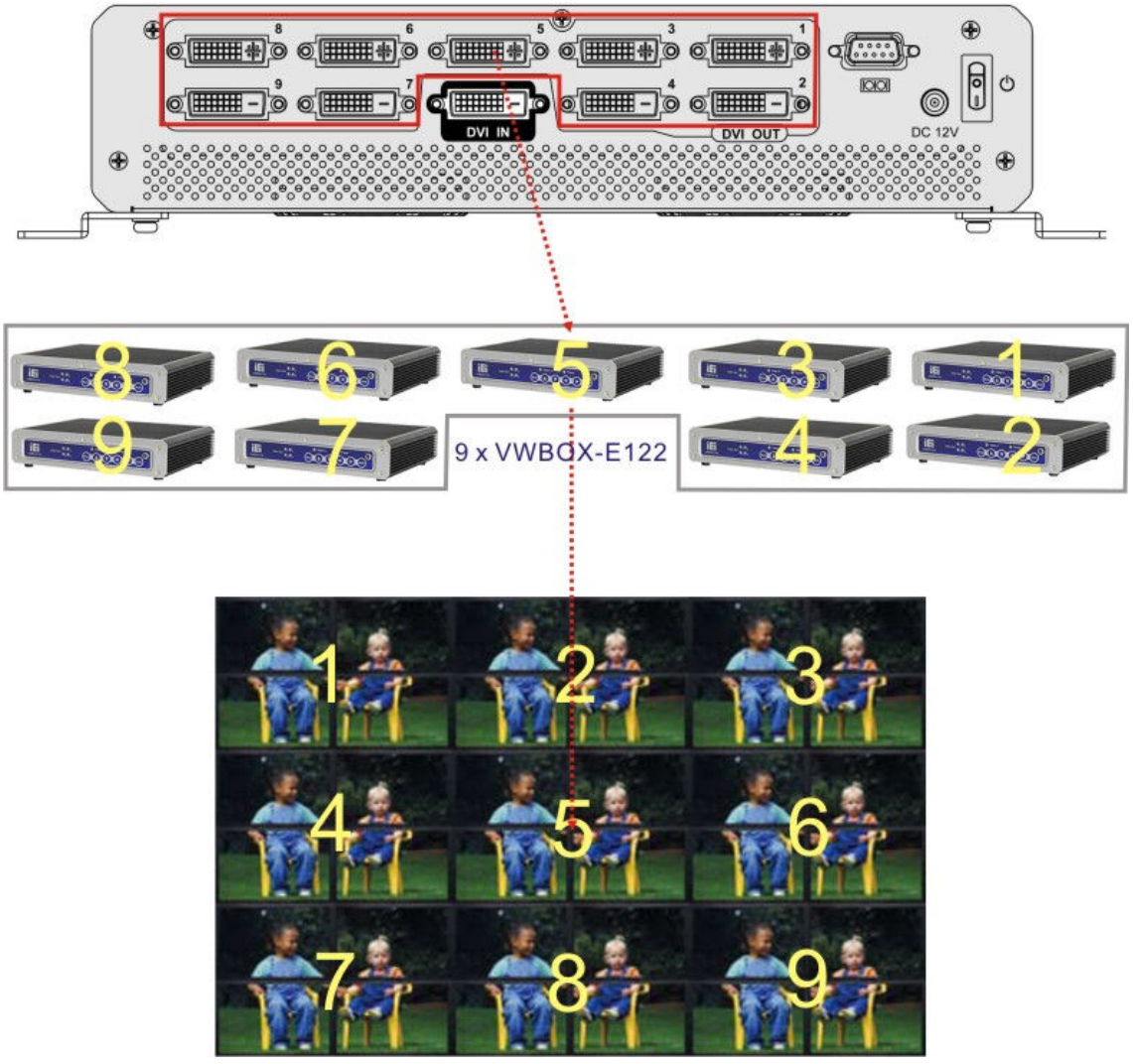

Figure 3-5: 36 Panel Setup

3.1.6 81 Panel, Multi-controller Installation Overview (iVW-UD133 Master controller)

The implementation of an 81-panel array using one iVW-UD133 as the master device and nine iVW-FD133 controllers as slave devices is shown in **Figure 3-5** below. Each iVW-FD133 slave controller connects to nine display panels in a 3x3 array.

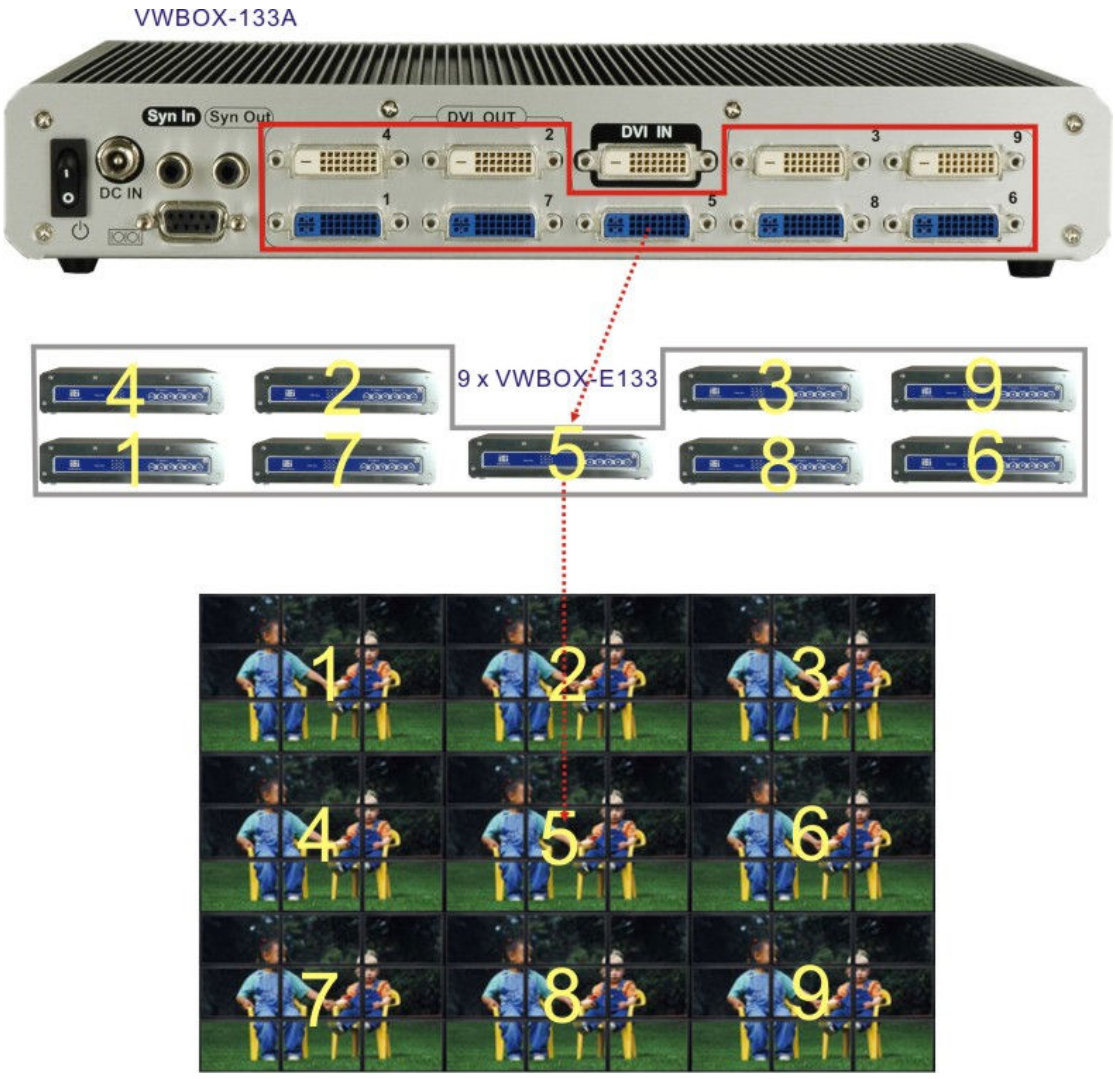

Figure 3-6: 81 Panel Setup With iVW-UD133 Master Controller

3.2 Installation Steps

To install the iVW-FD133 please follow the installation steps below:

Step 1: Install the LCD panels.

Step 2: Mount the iVW-FD133.

Step 3: Connect DVI output cables, video input cable (DVI-D), RS-232 cable and power adapter to the iVW-FD133.

Step 4: Adjust the screen resolution output settings.

Step 5: Select a screen mode for display output.

Step 6: Adjust the iVW-FD133 mask settings to align the images.

3.3 Install LCD Panels

The LCD panels are installed as a square array, with two rows and two columns, for a total of four monitors.

Recommended installation procedures are to

- Use all identical monitors
- Keep gaps between panels as small as possible for the best image
- Keep all horizontal gaps between monitors in the array consistent
- Keep all vertical gaps between monitors in the array consistent

3.4 Mounting

The iVW-FD133 must be placed on a table, desk or other firm surface. Optionally, the iVW-FD133 can be mounted using the included mounting brackets. The installation location must be:

- Out of direct sunlight
- Without anything on top of it
- On a firm surface
- Away from moisture and liquids

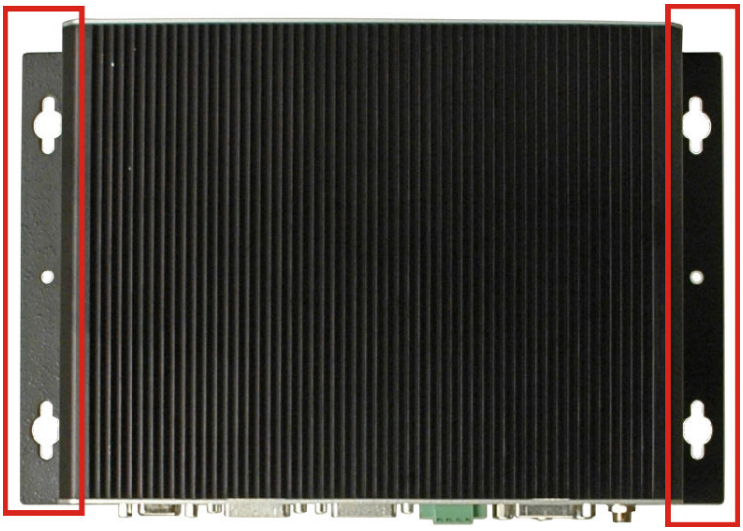

Figure 3-7: Mounting Brackets

3.5 Connect Cables

The cables that need to be attached are listed below and their connections are shown in **Figure 3-8**:

- **DVI-D input cable** – from the video source or computer to the iVW-FD133
- **DVI-D output cables** – from the iVW-FD133 to the LCD panels or other slave video box controllers. Make sure the cables are connected to the correct monitors as shown in **Figure 3-8**.
- **Power cable** – from the power adapter

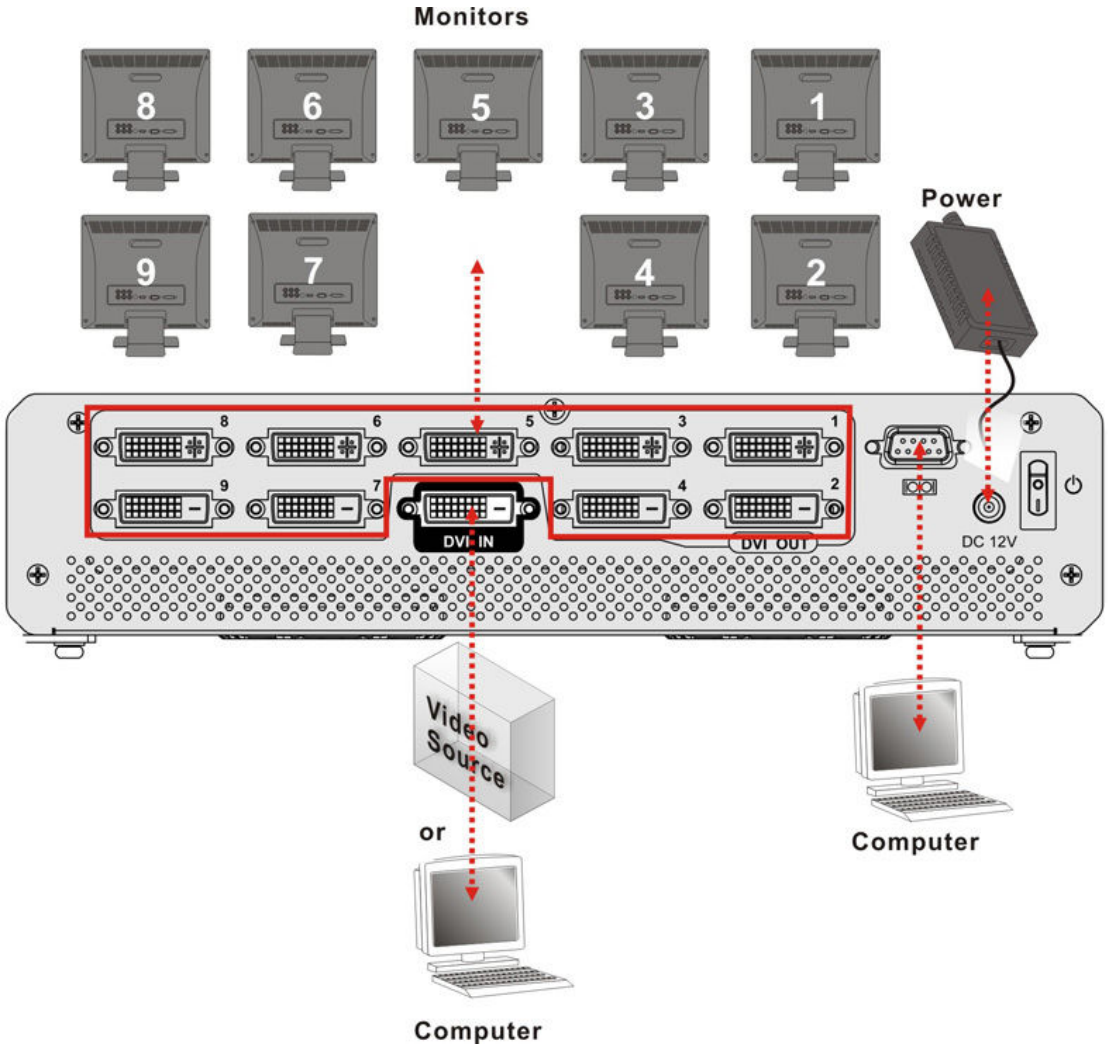

Figure 3-8: Cable Connections

3.5.1 Connect the Video Source and iVW-FD133

Connect the video source to the iVW-FD133. If the video source is a computer with the SmartOSD software installed, that computer can be used to adjust the monitor settings without using the OSD.

The video source connects directly to the iVW-FD133 through a DVI-D single link cable. To connect the video source to the iVW-FD133, follow the steps below.

Step 1: Attach the DVI video cable to the DVI output of the video source.

Step 2: Attach the DVI video cable to the DVI input on the iVW-FD133.

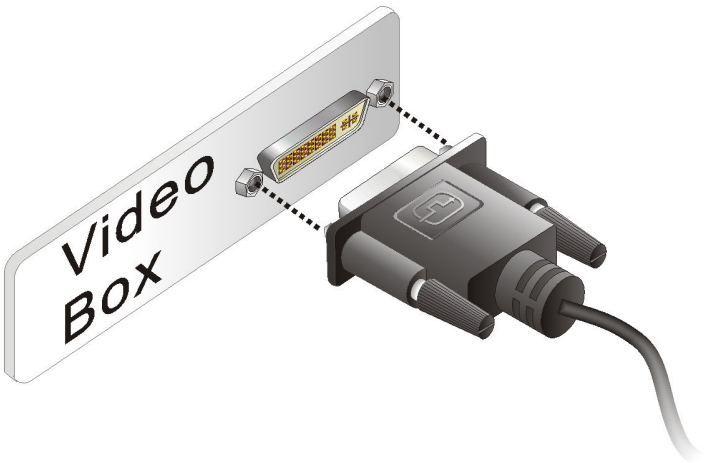

Figure 3-9: iVW-FD133 Video Input

3.5.2 Connect the iVW-FD133 to the Power Supply

Connect the included PSU into an AC power supply then connect the PSU to the iVW-FD133. The figure below shows the typical setup. There is no power switch, and the iVW-FD133 turns on as soon as it is connected to the PSU.

3.6 Input and Output Resolution

Correct adjustment of the input and output resolutions gives a much better quality final image. Follow the steps outlined in the subsections below to get the best image quality from the video wall controller.

3.6.1 Screen Ratio

With auto-scaling it is not necessary to match the input and output aspect ratios.

3.6.2 Input Resolution

Input resolution should be set as high as possible. Pick a resolution that meets the following criteria:

- Matches the LCD panel aspect ratio (as shown in 錯誤! 找不到參照來源。)
- Is the maximum possible (without exceeding input resolution limits)

3.6.3 Output Resolution

The output resolution should be set as high as possible, and meet the following criteria for best results:

- Matches video input and LCD panel resolution ratios
- Is the maximum possible
- Has a minimum width greater than half input width
- Has a minimum height greater than half input height

3.7 Display Mode

There are five display mode options available. The display mode can be set through the SmartOSD (**4.2.2.2**) or OSD menu (**4.3.1**). The modes are shown in **Figure 3-10** below.

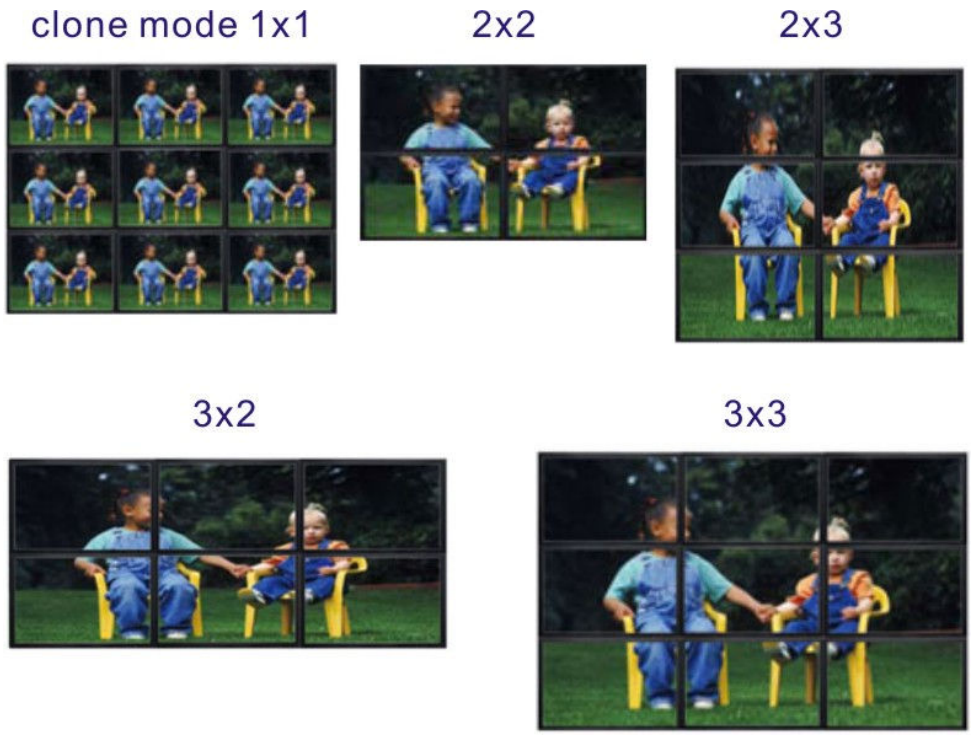

Figure 3-10: Display Mode

Chapter

4

OSD Functions

4.1 Mask Setup

The GeniMask masking control allows images to be adjusted slightly larger than the visible screen size, to compensate for the gaps between panels. GeniMask simplifies this process, allowing the masking to be adjusted simultaneously from a single controller. For a setup with one controller and four panels the horizontal and vertical gaps are easily adjusted according to the installation. With a master controller and four slave controllers, the mask setup remains just a simple. While adjusting the master controller, all the slave controllers are automatically adjusted, making setup time up to five times faster then individually setting up each video controller.

Use either the SmartOSD (**4.2.2.2**) or OSD menu (**4.3.4.1**) to set the mask value.

4.2 SmartOSD

SmartOSD is a proprietary On-Screen-Display (OSD) software solution that enables easy, remote monitor setting adjustments in a Windows environment. SmartOSD delivers excellent performance and provides more flexibility than the typical OSD hardware solutions when adjusting a monitor. SmartOSD also allows the screen output screen resolution and mask size to be adjusted using the DVI connection.

4.2.1 Pre-installation Notice

Before installing SmartOSD software, please make sure one of the following operating systems is installed:

- Windows 2000
- Windows XP
- Windows Vista
- Windows 7

4.2.2 Software Illustration

The table below shows the SmartOSD menu structure (**Table 4-1**).

Menu	Options
Interface	Interface Selection
Display	Display Resolution Display Mode Mask Setting
Setting	Digital I/O Test (for iVW-FD122 only) Input Source Power Factory Reset OSD Lock
About	Company Contact Details

Table 4-1: SmartOSD Menu Structure

4.2.2.1 Interface Page

The interface page is for choosing the interface between the computer and the iVW-FD133.

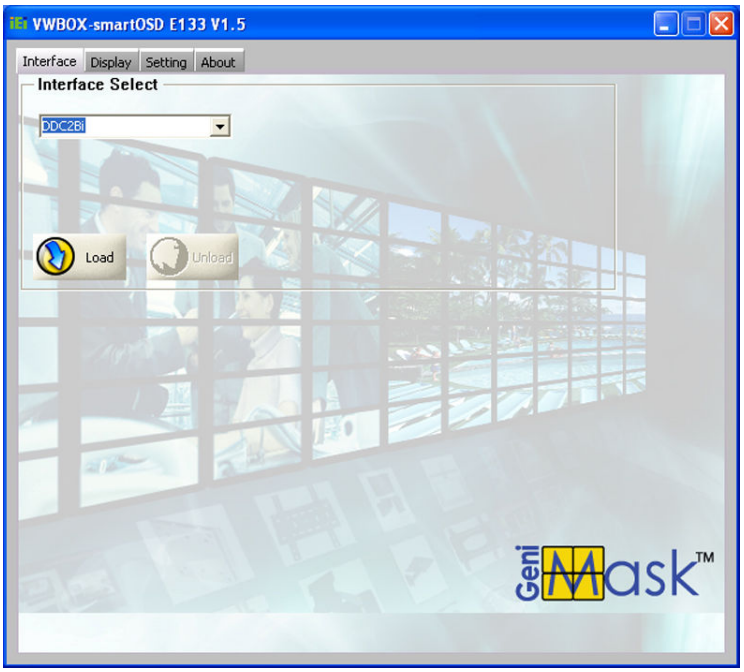

Figure 4-1: SmartOSD Interface Page

➔ **Interface Select**

The **Interface Select** option selects the data communication method between the computer and the iVW-FD133. If the computer also provides the video input, then communication can be done over the DVI cable. Serial ports can also be used for data communication. The dropdown list shows all communications ports by default. The following are shown for reference, as the exact ports available are system dependent.

- ➔ **DDC2Bi** DVI input
- ➔ **COM1** First serial port
- ➔ **COM3** Third serial port

4.2.2.2 Display Page

The Display Page adjusts the configuration of the panels in the video wall array.

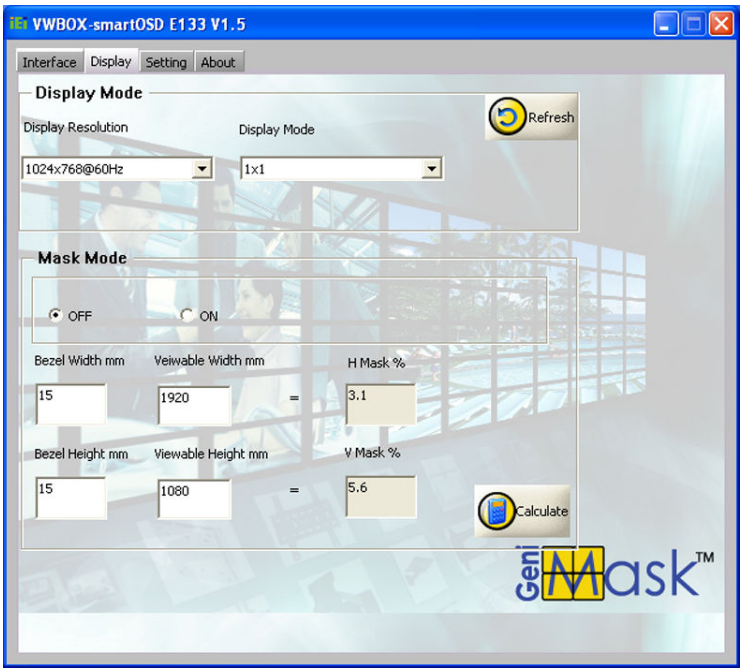

Figure 4-2: SmartOSD Display Page

➔ **Display Resolution**

The Display Resolution setting shows the resolution of the video image output. Display output setting options are shown below.

- 1024 x 768 @ 60 MHz
- 1360 x 768 @ 60 MHz
- 1280 x 1024 @ 60 MHz
- 1400 x 1050 @ 60 MHz
- 1680 x 1050 @ 60 MHz
- 1600 x 1200 @ 60 MHz
- 1920 x 1200 @ 60 MHz
- 1366 x 768 @ 60 MHz
- 1920 x 1080 @ 60 MHz

➔ **Display Mode**

The display mode option configures how the image is displayed on the screen.

➔ **1 x 1**	**DEFAULT**	The video input is cloned on all the monitors
➔ **2 x 2**		The video input is tiled over all the panels.
➔ **2 x 3**		The video input is split across a six-panel array in a 2 x 3 setup
➔ **3 x 2**		The video input is split across a six-panel array in a 3 x 2 setup
➔ **3 x 3**		The video input is split across a nine-panel array in a 3 x 3 setup

➔ **Mask Mode**

Mask mode toggles the masking function.

➔ **Off**		The video box doesn't compensate for gaps between LCD panels
➔ **On**	**DEFAULT**	The video box compensates for the gaps between LCD panels

➔ **H Mask %**

The horizontal mask compensates for the horizontal gap between panels. Enter the bezel width (mm) and viewable width (mm) into the corresponding data box to calculate the correct figure.

➔ **V Mask %**

The vertical mask compensates for the vertical gap between panels. Enter the bezel height (mm) and viewable height (mm) into the corresponding data box to calculate the correct figure.

4.2.2.3 Setting Page

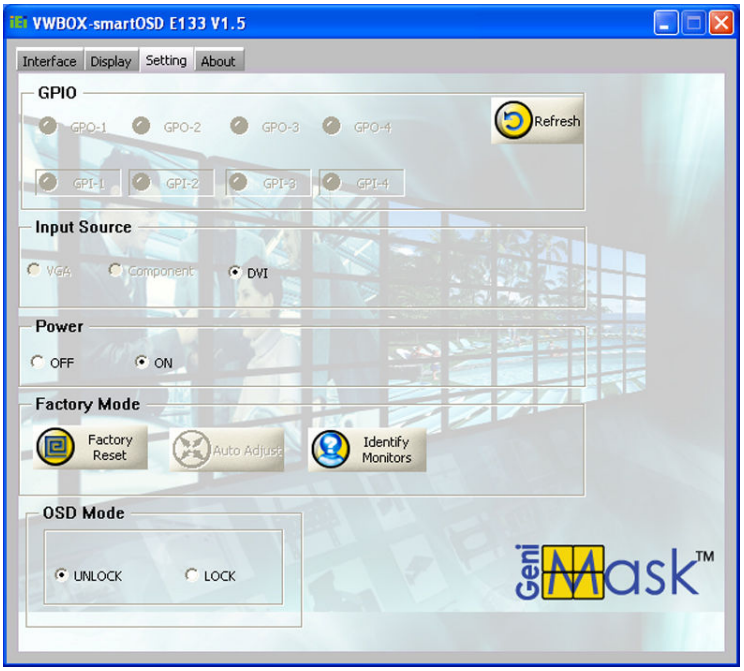

Figure 4-3: SmartOSD Setting Page

➔ **GPIO**

The GPIO settings are for the iVW-FD122 only.

➔ **Input Source**

The input video source is automatically selected by the iVW-FD133.

➔ **DVI** Input video source is DVI

➔ **Power**

The power option turns the iVW-FD133 on and off. Select one of the options below.

➔ **On** The video box displays the video source image onto the video outputs.

➔ **Off** The video box is in standby mode. No images are displayed on the video outputs, but the video box is ready to receive data commands.

➔ **Factory Mode**

Factory mode resets the iVW-FD133 to default settings. Two options are available for resetting the values.

➔ **Factory Default** Resets the video box to the factory defaults.

➔ **OSD Mode**

Two sets of options are available. The lock/unlock option sets whether the front panel OSD buttons can be used for adjusting settings. The normal/rotation option sets the onscreen OSD to a horizontal or vertical position.

➔ **Lock** The front panel OSD buttons cannot be used to adjust settings

➔ **Unlock** The front panel OSD buttons can be used to adjust settings

4.2.2.4 About Page

The About Page displays contact information.

Figure 4-4: SmartOSD About Page

4.2.3 Install Software

To install the software, please follow the steps below:

Step 1: Follow the instructions from the interactive installer to install the SmartOSD on the system.

Step 2: Insert the installation disk that came with the system and open the installation file.

Step 3: The welcome screen shown below appears.

IEI_smartOSD
Welcome to the IEI_smartOSD Setup Wizard
The installer will guide you through the steps required to install IEI_smartOSD on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

Figure 4-5: SmartOSD Setup Wizard

Step 4: Click **Next** to continue.

Step 5: The screen below appears.

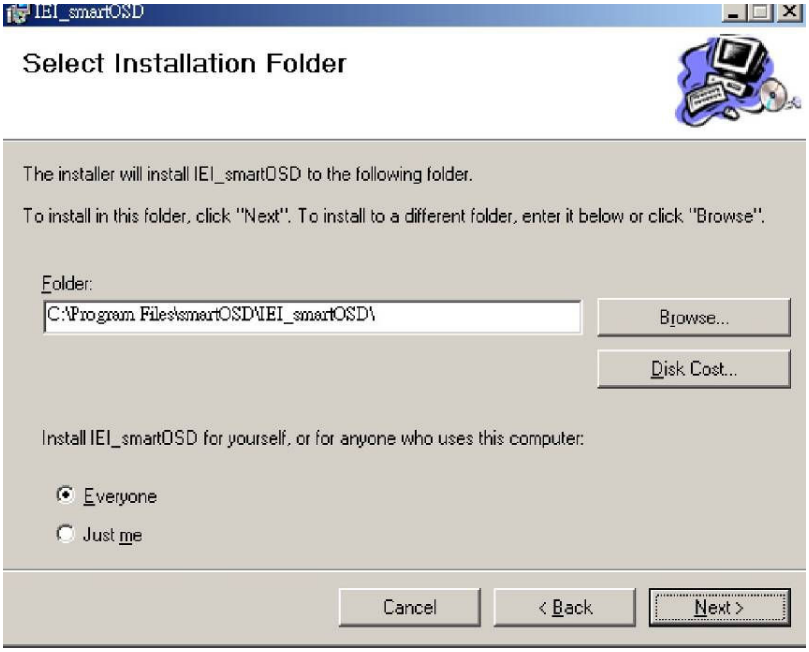
IEI_smartOSD
Select Installation Folder
The installer will install IEI_smartOSD to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\smartOSD\IEI_smartOSD\
Browse...
Disk Cost...
Install IEI_smartOSD for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

Figure 4-6: SmartOSD Select Installation Folder

Step 6: Select the installation folder from the screen shown above.

Step 7: Click **Next** to continue.

Step 8: The screen shown below appears.

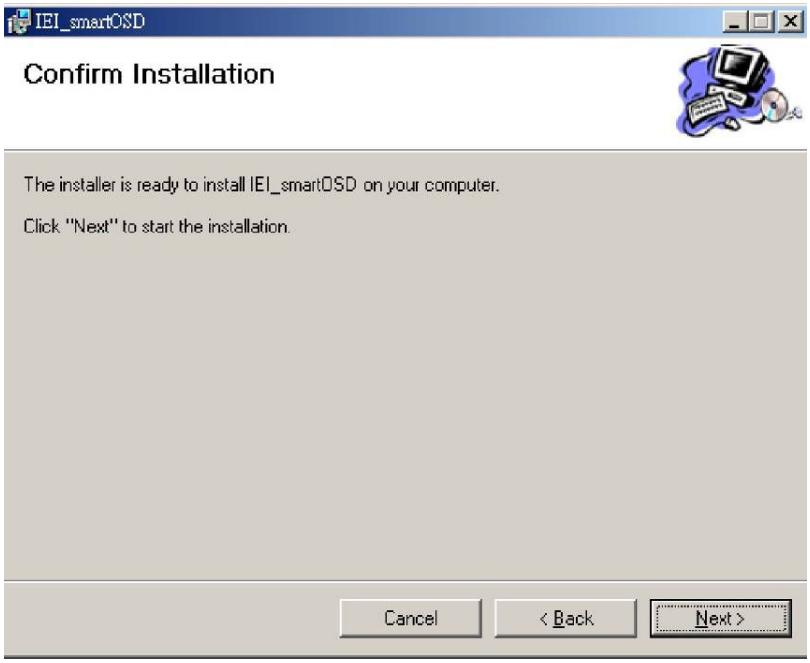
IEI_smartOSD
Confirm Installation
The installer is ready to install IEI_smartOSD on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

Figure 4-7: SmartOSD Confirm Installation

Step 9: Confirm the installation by clicking **Next** in the screen above.

Step 10: The program starts to install and the progress bar shown below appears.

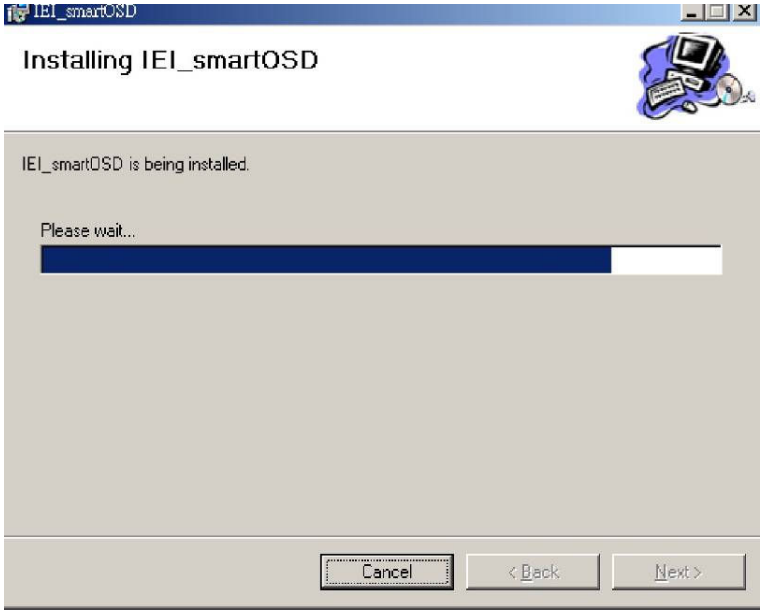

Figure 4-8: SmartOSD Installing

Step 11: When the installation is complete the screen below appears.

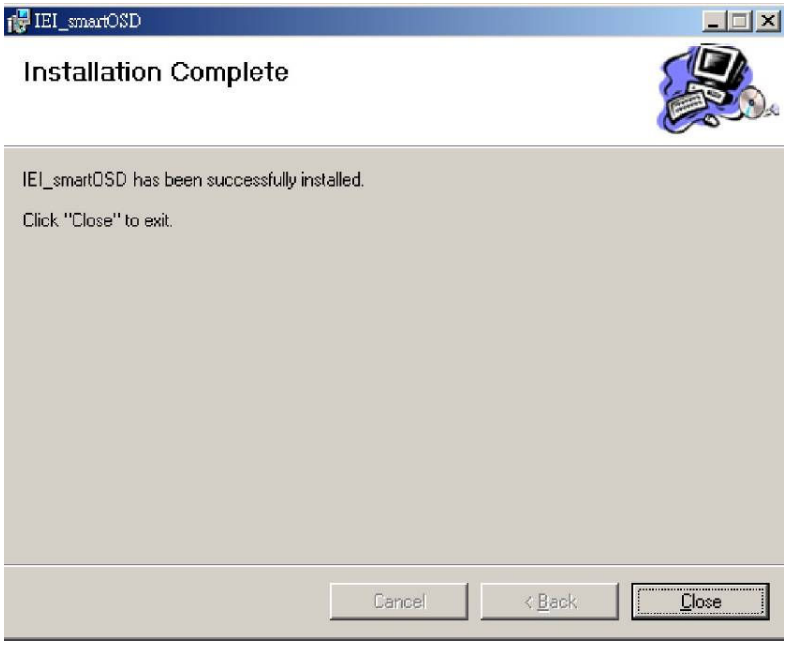

Figure 4-9: SmartOSD Installation Complete

Step 12: Click **Close** in the screen above.

Step 13: After quick setup is complete, the SmartOSD wizard logo appears on the desktop as shown in the screen below.

Step 14: To access the SmartOSD, click the SmartOSD wizard logo on the desktop.

4.2.4 Troubleshooting

For troubleshooting, please see the steps below:

4.2.4.1 Windows 2000 Installation Failure

Installation fails under Windows 2000 and shows the following image:

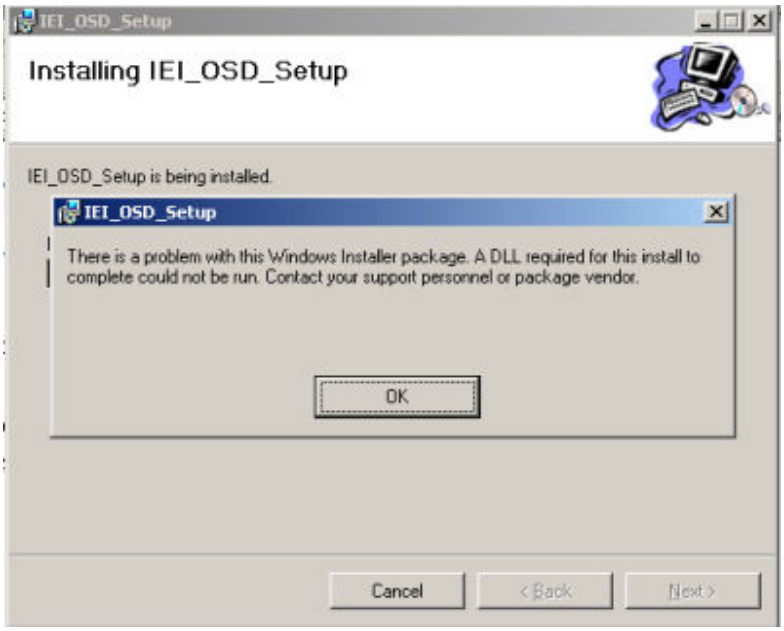
IEI_OSD_Setup
Installing IEI_OSD_Setup
IEI_OSD_Setup is being installed.
IEI_OSD_Setup
There is a problem with this Windows Installer package. A DLL required for this install to complete could not be run. Contact your support personnel or package vendor.
OK
Cancel
< Back
Next >

Figure 4-10: DLL Missing

Solution: Download and install service pack Windows Installer 3.1

4.2.4.2 Vista Installation Failure

Installation fails under Vista while showing following image:

Figure 4-11: Windows Vista Error

Solution: Install SmartOSD.exe as the administrator authority

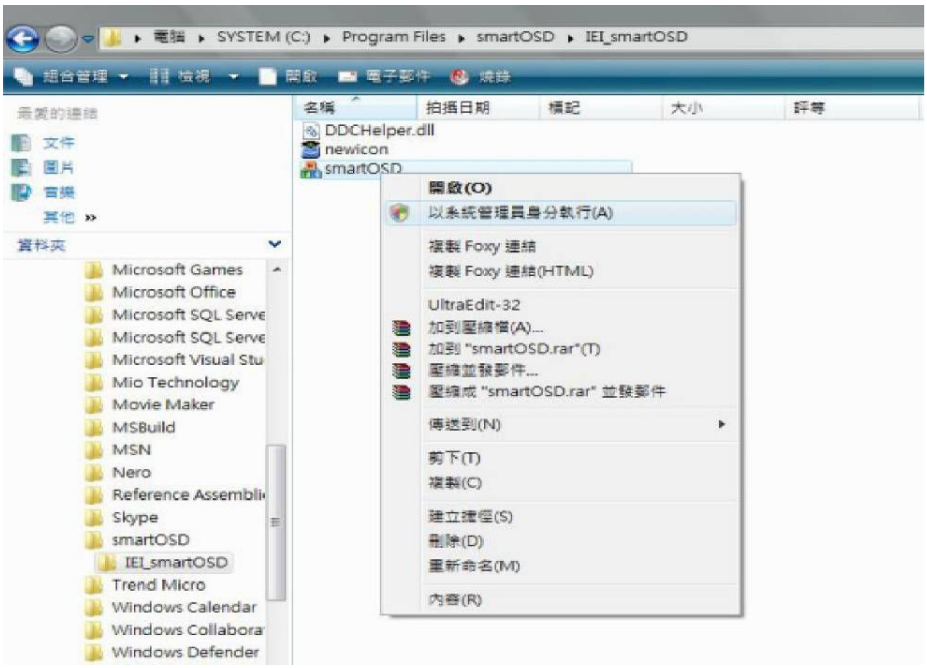

Figure 4-12: Install as Administrator

4.3 Using the OSD

The OSD menu functions are described below.

4.3.1 OSD Buttons

There are several on-screen-display (OSD) control buttons oriented either vertically on the right side of the monitor front panel or on the bottom of the monitor front panel. **Figure 4-13** shows a typical arrangement of OSD controls.

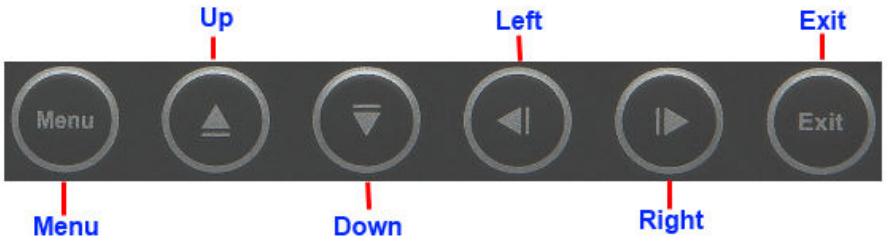

Figure 4-13: OSD Buttons

- **Power**. Turns the video box on and off.
- **Menu/Enter**. Enters the OSD, selects items and sets the new values entered.
- **Left**. Moves the selection left.
- **Right**. Moves the selection right.
- **Up**. Moves the selection up.
- **Down**. Moves the selection down.
- **Auto/Exit**. Exits from any menu.

4.3.2 OSD Lock

The OSD front panel buttons can be locked using the OSD lock function. To turn the OSD lock on and off, follow the steps below. (The OSD can also be locked using the SmartOSD).

Step 1: Push the "**Right**" and "**Auto/Exit**" buttons simultaneously for a few seconds.

Step 2: The OSD display shows the current status as locked or unlocked.

4.3.3 Menu Structure

The table below shows the OSD menu structure.

Menu	Options / Submenu	Options	
Display	Output		
	Display Mode		
	Mask ->	Horizontal Mask	
		Vertical Mask	
		Mask On/Off	
Setting	Factory		
	Information		
	Input ->	DVI	
		Component	
	Miscellaneous ->	OSD ->	OSD Timer
			OSD Rotation
	Identify		

Table 4-2: OSD Menu Structure

4.3.4 Display Menu

Image menu options are shown in **Figure 4-14** and described below.

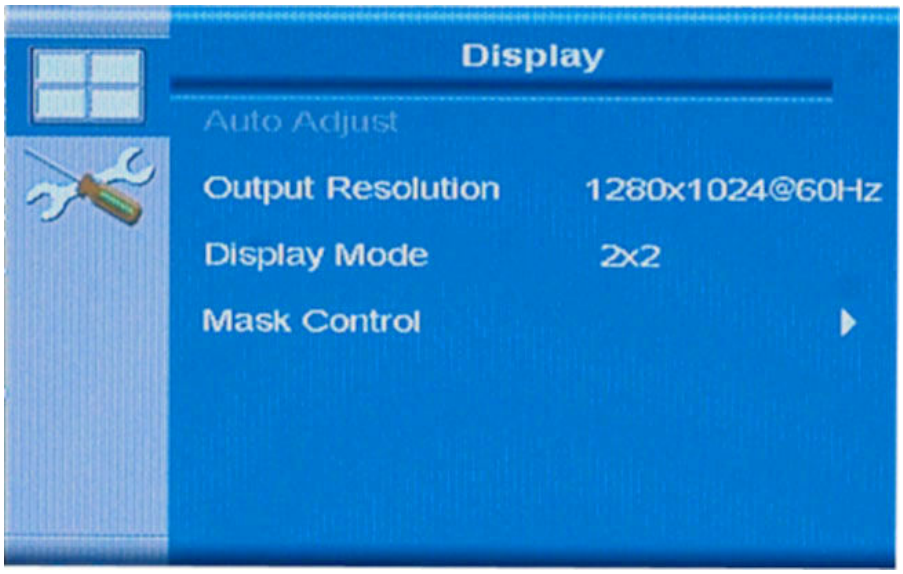

Figure 4-14: Display Menu

➔ **Display Resolution**

The Display Resolution setting shows the resolution of the video image output. Display output setting options are shown below.

- 1024 x 768 @ 60 MHz
- 1360 x 768 @ 60 MHz
- 1280 x 1024 @ 60 MHz
- 1400 x 1050 @ 60 MHz
- 1680 x 1050 @ 60 MHz
- 1600 x 1200 @ 60 MHz
- 1920 x 1200 @ 60 MHz
- 1366 x 768 @ 60 MHz
- 1920 x 1080 @ 60 MHz

➔ **Display Mode**

The display mode option configures how the image is displayed on the screen.

➔ **1 x 1**	**DEFAULT**	The video input is cloned on all the monitors
➔ **2 x 2**		The video input is tiled over all the panels.
➔ **2 x 3**		The video input is split across a six-panel array in a 2 x 3 setup
➔ **3 x 2**		The video input is split across a six-panel array in a 3 x 2 setup
➔ **3 x 3**		The video input is split across a nine-panel array in a 3 x 3 setup

➔ **Mask Control**

The Mask control compensates for the gaps between monitors in the video wall array. These settings are shown in **4.3.4.1**.

4.3.4.1 Mask Control

The mask control menu adjusts the mask settings. The mask settings compensate for the gaps between monitors in the video wall array. The mask control options are shown and described below.

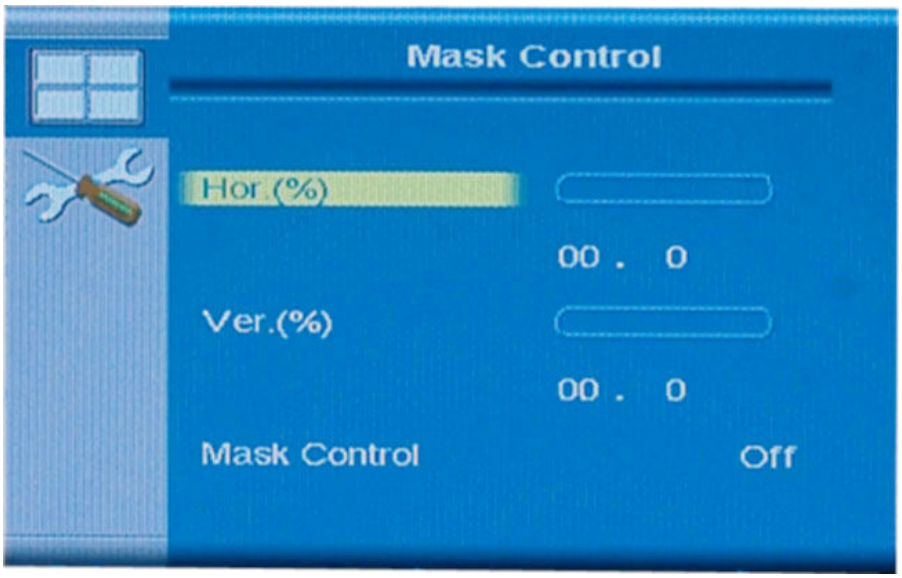

Figure 4-15: Mask Control

➔ **Horizontal Mask**

Set the horizontal mask according to the formula in **Figure 4-16.**

➔ **Vertical Mask**

Set the vertical mask according to the formula in **Figure 4-16.**

Bezel Width (mm)
Viewable Width (mm)
Viewable Height (mm)
Bezel Height (mm)
HMask Setting = Bezel Width (mm) / Viewable Width (mm) X 100
VMask Setting = Bezel Height (mm) / Viewable Height (mm) X 100

Figure 4-16: Mask Formula

➔ **Mask Control**

The mask control option turns the mask control on and off.

➔ **Off** **DEFAULT** The video box doesn't compensate for the gap between monitors

➔ **On** The video box compensates for the gap between monitors

4.3.5 System Menu

System menu options are shown in **Figure 4-17** and described in the subsections below.

Figure 4-17: Display Menu

➔ **Factory Reset**

Factory reset returns all the settings to the factory default settings.

➔ **Information**

Shows video box version information. The information details are shown in **4.3.5.1**.

➔ **Input Select**

Input select allows selection of the input source. Input selection is shown in **4.3.5.2**.

➔ **Misc**

Misc allows other OSD features to be adjusted. Misc options are shown in **4.3.5.3**.

➔ **Identify Monitors**

Identify monitors displays the monitor's ID within the monitor array.

4.3.5.1 Information

The information screen in **Figure 4-18** shows some basic information about the video box and the monitor. The details are described below.

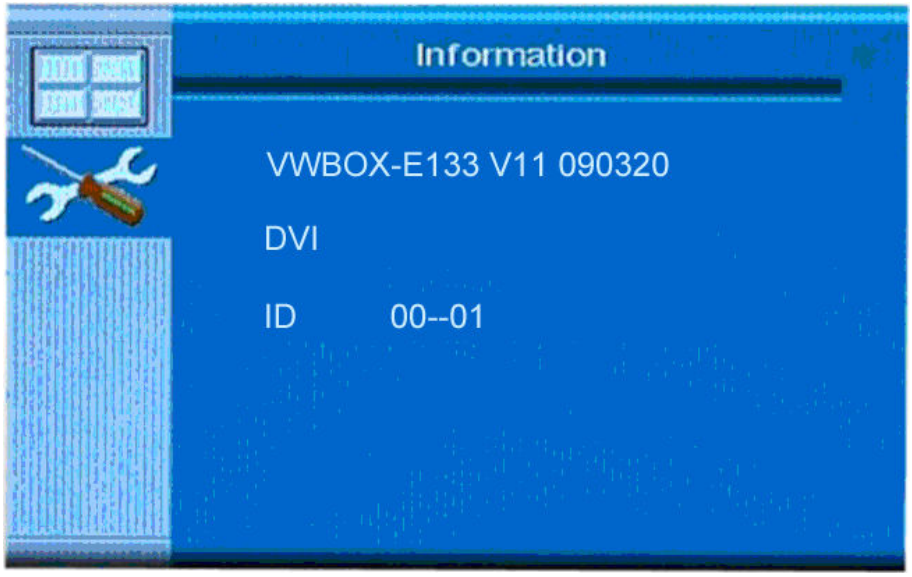

Figure 4-18: Information Screen

- Model name, firmware version and date
- Input type
- Video box ID (identifies the current video box in a larger array of video boxes)

4.3.5.2 Input Select

The input select screen in **Figure 4-19** shows the input options.

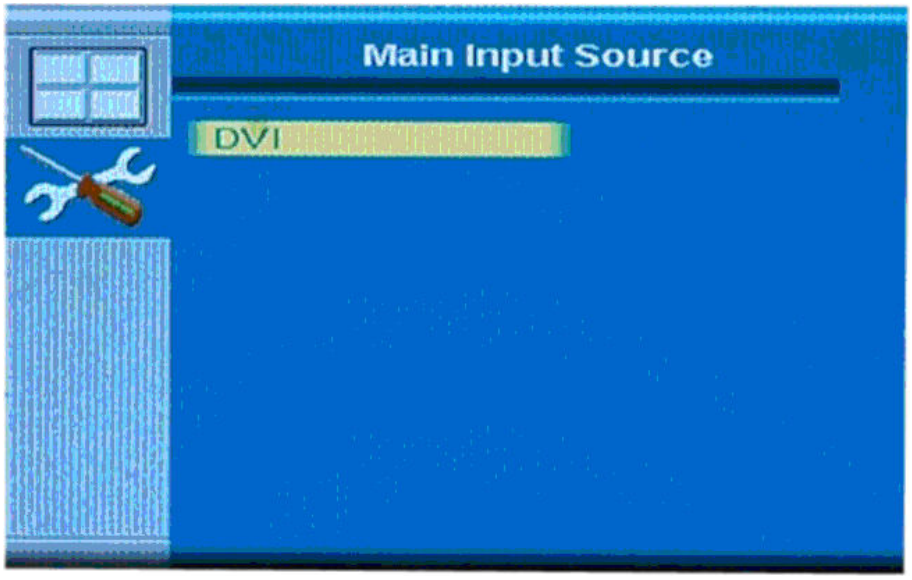

Figure 4-19: Input Select

The video box automatically selects the correct input source setting. The following options are available.

- DVI

4.3.5.3 Miscellaneous

The miscellaneous menu (**Figure 4-20**) allows the option to go to the OSD setup menu.

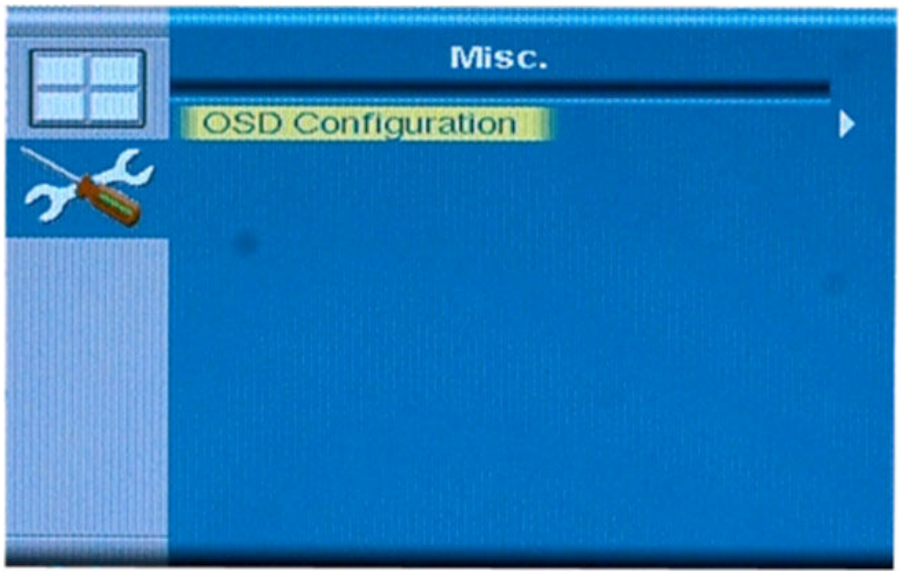

Figure 4-20: Input Select

➔ **OSD Configuration**

OSD configuration adjusts the display settings for the OSD display. OSD configuration settings are shown in **4.3.5.3.1**.

4.3.5.3.1 OSD Configuration

The OSD configuration menu (**Figure 4-21**) adjusts the rotation of the OSD, and how long it displays for.

Figure 4-21: Input Select

➔ **OSD Timer**

The OSD Timer sets how long the OSD screen stays on after the last button press.

4.4 Remote Control

The iVW-FD133 comes with a remote control for easy configuration of OSD settings. **Figure 4-22** shows the remote control and its function keys.

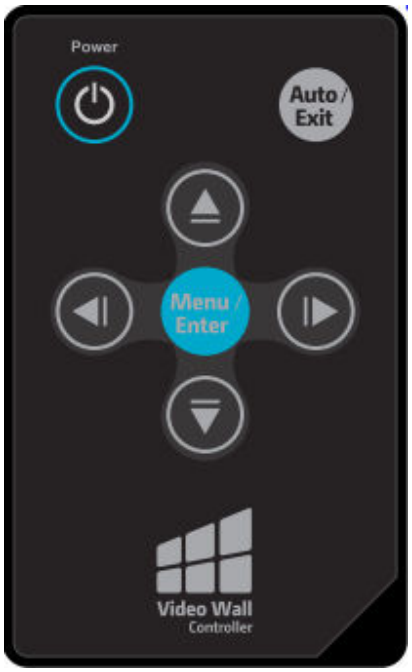

Figure 4-22: Remote Control

- **Power**. Turns the video box on and off.
- **Menu/Enter**. Enters the OSD, selects items and sets the new values entered.
- **Left**. Moves the selection left.
- **Right**. Moves the selection right.
- **Up**. Moves the selection up.
- **Down**. Moves the selection down.
- **Auto/Exit**. Exits from any menu.

Chapter

5

Troubleshooting and Maintenance

WARNING:

Take Anti-Static precautions whenever maintenance is being carried out on the embedded system components. Failure to take anti-static precautions can cause permanent embedded system damage.

5.1 Maintenance Overview

NOTE:

There are no user-serviceable parts inside. Make sure to carefully follow all the instructions in this section to diagnose any problems. If the problem persists, email ds_sales@indstech.com for help from a sales representative

To preserve the working integrity of the iVW-FD133 embedded system, the embedded system must be properly maintained. If embedded system components need replacement, the proper maintenance procedures must be followed to ensure the embedded system can continue to operate normally.

5.2 Troubleshooting

This section provides some simple troubleshooting suggestions.

5.2.1 No Image on One Monitor

If there is no image on one monitor, follow these steps to remedy the problem.

5.2.1.1 Check Monitor Power

Step 1: Check that the monitor is turned on.

Step 2: Check that the power source for the monitor is turned on.

Step 3: Check that the power source has the correct power rating (check panel specifications for details).

Step 4: Make sure the LCD panel power cables are securely fastened to the monitor and to the power source.

5.2.1.2 Check Panel Video Connection

Check to see that the video cable is fitted correctly.

Step 1: Check that the monitor is connected to the iVW-FD133.

Step 2: Securely attach the video cable to the panel and to the iVW-FD133.

Step 3: Fasten the video cable at both ends and tighten the video cable screws.

5.2.2 No Image Two or Three Monitors

If there is no image on more than one of the panels, then repeat the steps in **Section 5.2.1** for all of the monitors in the array.

5.2.3 No Image on Any Monitor

If no image displays on any monitors, repeat the steps in **Section 5.2.1** for all the monitors in the array, then try the following additional steps.

5.2.3.1 Check Video Box Power

Make sure that the video box is powered on.

Step 1: Check the power supply is connected to the power source.

Step 2: Check that the iVW-FD133 is connected to the power supply.

5.2.3.2 Check Source Video Connection

Check to that the source video cable is securely connected to the iVW-FD133.

Step 1: Securely attach the video cable from the video source to the iVW-FD133.

Step 2: Fasten the video cable at both ends and tighten the video cable screws.